

**SPECIFICATION AMENDMENTS**

*Page 7, lines 15-27:*

[0019] As described in Example I, the activity of metabolically indicative enzyme biotinidase, as well as the concentration of alpha amino acids and carnitines, were simultaneously determined from a single sample. As is shown in FIG. 1, in spite of its multiplex character, the sensitivity of the method for detecting biotinidase (FIG. 1) is comparable to a well-known fluorimetric enzyme assay method. The letters A, B, C, D, E, and F shown in Figure 1 are names assigned to calibration samples, "calibrators." Similarly, as shown in Tables 6 and 7, a method of the invention has sensitivity comparable to well-known mass spectrometry methods that measure analytes without regard for enzyme activities. Based on this discovery of simultaneous detection of metabolic analytes and enzyme activity from a single sample, the invention provides methods for detecting metabolic disorders. As is described in Example 2, the accuracy of amino acid amounts detected using a method of the invention can be increased by including one or more protease inhibitors in the selected assay format.